

REMARKS

Applicants respectfully request entry of the following amendments and remarks in response to the Office Action mailed January 14, 2009. Applicants respectfully submit that the amendments and remarks contained herein place the instant application in condition for allowance.

Upon entry of the amendments in this response, claims 1 – 20 are pending. In particular, Applicants amend claim 1. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

I. Claim 1 is Allowable Over *Gaytan* and *Priem*

The Office Action indicates that claim 1 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 5,638,367 (“*Gaytan*”) in view of U.S. Patent Number 6,023,738 (“*Priem*”). Applicants respectfully traverse this rejection for at least the reason that *Gaytan* in view of *Priem* fails to disclose, teach, or suggest all of the elements of claim 1. More specifically, claim 1 recites:

A method for transferring network packet data stored in memory to an output device, the method comprising the steps of:

concatenating one or more packet data octets from at least a first data word having at least one packet data octet to be included in a network packet ***to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word;***

storing the first sequence of packet data octets in a FIFO buffer operably connected to the output device when the octet length of the sequence of packet data octets is equal to the octet length of a data word; and

storing a first subset of packet data octets from the first sequence of packet data octets in the FIFO buffer and storing a remaining second subset of packet data octets from the first sequence in an alignment register when the octet length of the first sequence of packet data octets exceeds the octet length of a data word, wherein an octet length of the first subset of packet data octets is equal to the octet length of a data word.

(Emphasis added).

Applicants respectfully submit that claim 1 is allowable over the cited art for at least the reason that neither *Gaytan* nor *Priem*, taken alone or in combination, discloses, teaches, or suggests a "method for transferring network packet data stored in memory to an output device, the method comprising the steps of... concatenating one or more packet data octets from at least a first data word having at least one packet data octet to be included in a network packet **to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word**" as recited in claim 1. More specifically *Gaytan* discloses "one primary function of the System and ATM Layer Core 220 is to retrieve data from host memory and to perform packing operations on the data before temporarily storing the data within the TX buffer memory through packing circuitry... Thereafter, the data may be segmented into cells and transferred to the array of TX FIFOs" (column 5, line 52). Despite the Office Action argument, as illustrated in this section, *Gaytan* discloses a "packing operations" and never even suggests concatenating "**to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word**" as recited in claim 1.

Similarly, *Priem* fails to overcome the deficiencies of *Gaytan*. More specifically, *Priem* discloses a "first-in first-out (FIFO) buffer [that] allows large amounts of command data to accumulate from a myriad of small transfers from the bus control unit so that the accelerator does not have to wait for each new transfer before it can proceed" (column 2, line 3). As illustrated in this passage, *Priem* discloses using a FIFO to speed up processing rates. However, *Priem* fails to even suggest "concatenating one or more packet data octets from at least a first data word having at least one packet data octet to be included in a network packet **to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word**" as recited in claim 1.

II. Claim 5 is Allowable Over *Gaytan* and *Priem*

The Office Action indicates that claim 5 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 5,638,367 ("*Gaytan*") in view of U.S. Patent Number 6,023,738 ("*Priem*"). Applicants respectfully traverse this rejection for at least the reason that *Gaytan* in view of *Priem* fails to disclose, teach, or suggest all of the elements of claim 5. More specifically, claim 5 recites:

A system for transferring network packet data stored in memory to an output device, the system comprising:

a direct memory access (DMA) interface for accessing a set of data words stored in memory, each data word having at least one valid octet to be included in a network packet and each data word being accessed using a DMA address associated with the data word;

a first in-first out (FIFO) buffer for storing network packet data to be transmitted by the output device; and

an alignment block having at least one alignment register, wherein the alignment register for storing at least one data octet, and wherein the alignment block is adapted to:

concatenate one or more packet data octets from at least a first data word having at least one packet data octet to be included in a network packet **to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word;**

store the first sequence of packet data octets in a FIFO buffer operably connected to the output device when the octet length of the sequence of packet data octets is equal to the octet length of a data word; and

store a first subset of packet data octets from the first sequence of packet data octets in the FIFO buffer and storing a remaining second subset of packet data octets from the first sequence in an alignment register when the octet length of the first sequence of packet data octets exceeds the octet length of a data word, wherein an octet length of the first subset of packet data octets is equal to the octet length of a data word.

(Emphasis added).

Applicants respectfully submit that claim 5 is allowable over the cited art for at least the reason that neither *Gaytan* nor *Priem*, taken alone or in combination, discloses, teaches, or suggests a "system for transferring network packet data stored in memory to an output device, the system comprising... an alignment block having at least one alignment register, wherein the

alignment register for storing at least one data octet, and wherein the alignment block is adapted to... concatenate one or more packet data octets from at least a first data word having at least one packet data octet to be included in a network packet **to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word'** as recited in claim 5. More specifically *Gaytan* discloses "one primary function of the System and ATM Layer Core 220 is to retrieve data from host memory and to perform packing operations on the data before temporarily storing the data within the TX buffer memory through packing circuitry... Thereafter, the data may be segmented into cells and transferred to the array of TX FIFOs" (column 5, line 52). Despite the Office Action argument, as illustrated in this section, *Gaytan* discloses a "packing operations" and never even suggests concatenating **"to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word"** as recited in claim 5.

Similarly, *Priem* fails to overcome the deficiencies of *Gaytan*. More specifically, *Priem* discloses a "first-in first-out (FIFO) buffer [that] allows large amounts of command data to accumulate from a myriad of small transfers from the bus control unit so that the accelerator does not have to wait for each new transfer before it can proceed" (column 2, line 3). As illustrated in this passage, *Priem* discloses using a FIFO to speed up processing rates. However, *Priem* fails to even suggest "concatenat[ing] one or more packet data octets from at least a first data word having at least one packet data octet to be included in a network packet **to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word'** as recited in claim 5.

III. Claim 14 is Allowable Over *Gaytan* and *Priem*

The Office Action indicates that claim 14 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 5,638,367 ("*Gaytan*") in view of U.S.

Patent Number 6,023,738 ("*Priem*"). Applicants respectfully traverse this rejection for at least the reason that *Gaytan* in view of *Priem* fails to disclose, teach, or suggest all of the elements of claim 14. More specifically, claim 14 recites:

A system for transferring network packet data stored in memory to an output device, the method comprising:

means for concatenating one or more packet data octets from at least a first data word having at least one packet data octet to be included in a network packet ***to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word;***

means for storing the first sequence of packet data octets in a FIFO buffer operably connected to the output device when the octet length of the sequence of packet data octets is equal to the octet length of a data word; and

means for storing a first subset of packet data octets from the first sequence of packet data octets in the FIFO buffer and storing a remaining second subset of packet data octets from the first sequence in an alignment register when the octet length of the first sequence of packet data octets exceeds the octet length of a data word, wherein an octet length of the first subset of packet data octets is equal to the octet length of a data word.

(Emphasis added).

Applicants respectfully submit that claim 14 is allowable over the cited art for at least the reason that neither *Gaytan* nor *Priem*, taken alone or in combination, discloses, teaches, or suggests a "system for transferring network packet data stored in memory to an output device, the method comprising... means for concatenating one or more packet data octets from at least a first data word having at least one packet data octet to be included in a network packet ***to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word***" as recited in claim 14. More specifically *Gaytan* discloses "one primary function of the System and ATM Layer Core 220 is to retrieve data from host memory and to perform packing operations on the data before temporarily storing the data within the TX buffer memory through packing circuitry... Thereafter, the data may be segmented into cells and transferred to the array of TX FIFOs" (column 5, line 52). Despite the Office Action argument, as illustrated in this section, *Gaytan* discloses a "packing operations" and

never even suggests concatenating "**to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word**" as recited in claim 14.

Similarly, *Priem* fails to overcome the deficiencies of *Gaytan*. More specifically, *Priem* discloses a "first-in first-out (FIFO) buffer [that] allows large amounts of command data to accumulate from a myriad of small transfers from the bus control unit so that the accelerator does not have to wait for each new transfer before it can proceed" (column 2, line 3). As illustrated in this passage, *Priem* discloses using a FIFO to speed up processing rates. However, *Priem* fails to even suggest "means for concatenating one or more packet data octets from at least a first data word having at least one packet data octet to be included in a network packet **to generate a first sequence of packet data octets having an octet length at least as great as an octet length of a data word**" as recited in claim 14.

IV. Claims 2 – 4, 6 – 13, and 15 – 20 are Allowable Over *Gaytan* and *Priem*

The Office Action indicates that claims 2 – 4, 6 – 13, and 15 – 20 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 5,638,367 ("*Gaytan*") in view of U.S. Patent Number 6,023,738 ("*Priem*"). Applicants respectfully traverse this rejection for at least the reason that *Gaytan* in view of *Priem* fails to disclose, teach, or suggest all of the elements of claims 2 – 4, 6 – 13, and 15 – 20. More specifically, dependent claims 2 – 4 are believed to be allowable for at least the reason that these claims depend from and include the elements of allowable independent claim 1. Dependent claims 6 – 13 are believed to be allowable for at least the reason that these claims depend from and include the elements of allowable independent claim 5. Further, dependent claims 15 – 20 are believed to be allowable for at least the reason that they depend from and include the elements of allowable independent claim 14. *In re Fine, Minnesota Mining and Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, all objections and/or rejections have been traversed, rendered moot, and/or addressed, and that the now pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and Official Notice, or statements interpreted similarly, should not be considered well-known for the particular and specific reasons that the claimed combinations are too complex to support such conclusions and because the Office Action does not include specific findings predicated on sound technical and scientific reasoning to support such conclusions.

If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

/afb/

Anthony F. Bonner Jr. Reg. No. 55,012

**THOMAS, KAYDEN,
HORSTEMEYER & RISLEY, L.L.P.**
Suite 1500
600 Galleria Parkway SE
Atlanta, Georgia 30339
(770) 933-9500
Customer No.: **38823**